Testimony of
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Health Care Provider and Payer Costs and Cost Trends
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Good morning Commissioner Morales and Attorney General Coakley thank you for this opportunity to present testimony. My name is Dr. Judith Shindul-Rothschild, I am a registered nurse and an associate professor at Boston College School of Nursing. I have been researching the impact of hospital financing on nursing practice and patient care in Massachusetts hospitals since the 1980s. I have testified on the impact of Chapter 372, Chapter 574 and Chapter 23 -- prospective payment programs which were enacted in the Commonwealth during the 1980s. I have also testified on the impact of Chapter 495 enacted in December 1991, which deregulated health care financing in the Commonwealth. I concluded my testimony before the Senate Post Audit and Oversight Committee in 1994 by stating:

"Competition" and "privatization" are policies which gained prominence due to a lack of will to challenge a Republican governor who had enticing economic theories that left weighty decisions about allocating health care to the free market instead of our elected representatives and public officials. Too much is at stake to sit back and watch the "scorpions" battle until only one is left. Massachusetts as a leader in the nation for health care services, should be a leader in the nation for innovative health care reform, hopefully this hearing will begin that important process".

Sixteen years later, Massachusetts has the proud distinction of providing health insurance coverage to 97.4% of Massachusetts citizens and dubious distinction of having one of the most expensive health care delivery systems in the nation. The challenge of these hearings, indeed the challenge facing health care reform efforts throughout these past decades, is how we can create conditions that provide access to high-quality health care at a price individuals, families, employers and the Commonwealth can afford. I will address specifically what role registered nurses in the Commonwealth can have in achieving these goals.

The AG and DHCFP Preliminary Report found a 190% variance in costs across hospitals in Massachusetts. The Preliminary Report states, *"Price variations are not correlated to (1) quality of care, (2) the sickness or complexity of the population being served, (3) the extent to which a provider is responsible for caring for a large portion of patients on Medicare or*

Medicaid, or (4) whether a provider is an academic teaching or research facility. Moreover, (5) price variations are not adequately explained by differences in hospital costs of delivering similar services at similar facilities" (AG Report, p.2).

#1 – *"The prices paid to hospitals do not correlate to the acuity or complexity of the cases handled by the hospital as measured by the hospital case mix index (CMI)* (AG Report, p.9)."

- The nursing profession has long criticized using DRGs or case mix index as a proxy for the complexity or acuity of patient care. Specifically, DRGs and CMI fail to account for the intensity of ***nursing*** care needs of patients. DRGs and CMI are a proxy for medical care needs. Welton and Dismuke (2008) found that adding a nursing intensity adjustment to existing inpatient billing improved the explained variance in Massachusetts hospital costs by 12.7% for all payers (see attached article). It is my belief the conclusion in the Preliminary Report that the variance in hospital costs can't be explained by the severity or complexity of care is flawed by the indices used in the analysis which fail to account for the intensity of nursing care.

- The New York State Department of Health, in collaboration with the New York State Nurses Association, has adjusted instate Medicaid rates to hospitals using a separate Nursing Intensity Weight for each DRG for more than a decade (Knauf et al., 2006).

- Two recent studies describe the challenges of incorporating nursing intensity to measure differences in the costs and quality of care among hospitals. The research perspectives of the studies represent accounting (Finkler, 2008) and policy (Ginsberg, 2008) perspectives. Both papers address the challenges of developing payment strategies aligned to quality and outcomes of nursing care. (See attached).

- The Robert Wood Johnson Foundation sponsored a conference in 2007 on "The Economics of Nursing: Reimbursement for Quality Nursing care," which recommended financing models address the economic value of nursing care by separating the cost of direct nurse-patient care from per diem room and board charges; and, improving the sensitivity of DRGs by adding Nursing Intensity Weights.

Recommendation:

I strongly recommend that the Commonwealth, the Massachusetts Nurses Association and the Massachusetts Hospital Association to adopt a measure of the intensity of nursing care that more accurately facilitates comparisons among Massachusetts hospitals about the complexity and acuity of patient care. Nursing Intensity Weights added to DRGs have the advantage of simplicity. However, I believe, ideally, the goal should be to develop an innovative model that uses "real-time" nursing intensity factors for each shift collected through an electronic medical record (EMR). There are software applications to the EMR used for "real-time" nurse staffing

that could be adapted to measure of nursing intensity that have the advantage of being patient-focused and in real-time.

#2 - *"Preliminary results indicate that there is no correlation between price and quality, and certainly not the positive correlation between price and quality we would hope to see in a rational, value-based health care market".* (AG report, p. 9)

- In 2006, the Massachusetts Hospital Association conducted a pilot test on a subset of NQF-endorsed nursing-sensitive measures (Smith & Jordon, 2008). The MHA pilot study identified several limitations of adopting nurse sensitive outcomes measures as an index of quality nursing care including: risk stratification by hospital size and unit type and empirically based benchmarks.
- The Robert Wood Johnson conference "The Economics of Nursing: Reimbursement for Quality Nursing care," noted that evidence regarding the value of nursing should be translated and disseminated, and the 15 National Quality Forum nursing-sensitive measures should be added to existing pay-for-performance measures. The National Voluntary Consensus Standards for Nursing-Sensitive Care (2004) include: failure to rescue, pressure ulcer prevalence, falls, use of restraint prevalence, UTIs from urinary catheters, central line catheter-associated blood stream infections, ventilator-associated pneumonia, smoking cessation counseling, nursing staff skill mix, nursing care hours per patient day, practice environment scale—Nursing Work Index, and voluntary turnover.
- Provider participants in these hearings acknowledged the importance of promoting financing models that rewarded providers based on quality outcomes. One community hospital administrator, noting the complexity of the myriad of quality measures collected by hospitals, made a plea for consensus on 15 quality outcome measures.

Recommendation:

In my opinion, there has been little attention to quality in these hearings – there must be a balance between price reforms and attention to quality outcomes or the effects on patients will be disastrous. I am sympathetic to the plea from a Massachusetts hospital administrator to narrow quality indicators to 15 empirically based measures to simplify comparisons for consumers and payers. I would recommend that at least some of these measures be "failure to rescue", "sepsis" and "registered nurse staffing". Specifically, the mean number of patients cared for by a registered nurse in specialty unit during a 24 hour period. One simple measure of registered nurse staffing … for example, in the CCU in Hospital X, registered nurses in a 24 hour period cared for an average of 1.5 patients.

#3 – *"The prices paid to hospitals in this insurer's network vary by about 190% from the lowest to the second highest paid hospital"* (AG report, pg. 8).

The wide variation in pricing is stunning and certainly begs the question, what forces could be at work to create such disparities? As a nursing researcher, I approached this question by examining differences in the wages and labor force participation of registered nurses. The pattern of labor force participation by registered nurses over many decades has followed a cyclical pattern driven by the quality of nurses' working conditions and the competitiveness of salaries. At the beginning of the decade, RN wages in Massachusetts, in Boston and nationally were similar. However, unlike RN labor force participation nationally, RN labor force participation in Massachusetts fell and continued to decline until 2003.

RN labor force participation began to improve in 2004 when RN wages in Massachusetts rose relative to RN wages nationally and when hospitals began to abandon work redesign models that substituted of unlicensed personnel for registered nurses (see Table 1). When RN wages decline to unacceptable levels, RN labor force participation declines and RN vacancy rates rise, which triggers the familiar cycle of RN shortages and understaffing in Massachusetts hospitals. In interpreting the impact registered nurses have on the health care system, it is essential to examine labor force participation rates, not the number of registered nurses per population precisely because of the cyclical nature of registered nurse employment.

To understand, from a nursing perspective, the 190% variation in hospital charges identified in the Preliminary Report, I analyzed 16 high and low RN wage hospitals in the Commonwealth on a range of demographic, financial, quality and nurse staffing measures (see Table 2). When comparing 8 Massachusetts hospitals with the highest RN hourly wage (M= $42.92, SD=4.73, 95% confidence limits $38.97-$46.87), with 8 Massachusetts hospitals with the lowest RN hourly wage (M=$35.23, SD=0.82, 95% confidence limits $34.54-$35.91) I found:

- RN hourly wages are higher in Massachusetts teaching hospitals than in community hospitals ($p<.01$).
- RN hourly wages are higher in more profitable Massachusetts hospitals ($p < .05$).
- Hospitals with higher total Emergency Department volume have higher RN wages ($p<.05$).
- The fewer number of patients assigned to RNs on medical-surgical units, the higher the hospital total charges ($p<.01$) and the greater the hospital profit ($p<.05$).
- I did *not* find an association between RN wages and total hospital charges or hospital charges for separate medical and surgical procedures. Nor did I find an association between RN staffing on step-down or critical care units and total hospital charges or

profit. These findings are limited by the small number of hospitals I included in the analysis but I sought to look at the extremes to identify noteworthy trends.

• It is important to recognize there is marked variation in RN wages across Massachusetts. My analysis of RN wage data and data from the U.S. Bureau of Labor Statistics concur that higher RN wages in Massachusetts cluster in the Boston hospitals. Using RN wage data from the U.S. Bureau of Labor Statistics, the Mean hourly wage of registered nurses excluding Boston is $1.65 above the national RN Mean hourly wage (see Table 3).

Recommendation:

To improve the overall accuracy and equity of payment relative to actual nursing care, it is essential that nursing costs not be bundled with other hospital expenses or inflated to cover uncompensated care or poorly reimbursed medical patients who require more intense nursing care. I propose adoption of hospital accounting procedures that separate the cost nursing care from a fixed per diem charge. A model proposed by Welton, Zone-Smith & Fischer (2006) uses the existing revenue 023X code to capture the actual or estimated variable nursing time and charge. This method was also recommended by the Research Triangle Institute's report regarding charge compression to CMS (Dalton, 2007).

Summary:

Extensive studies have linked positive patient outcomes with the adequacy of registered nurse staffing. All too commonly, when hospitals face financial challenges, one of the first responses is to cut labor costs by cutting the numbers of registered nurses available to care for patients or replacing registered nurses with unlicensed personnel. Nor do we want to create a healthcare market which excessively suppresses of RN wages and sets in motion the familiar cycle of RN shortages and high RN vacancy rates in Massachusetts hospitals. Throughout my career, and in testimony over several decades about health care financing in the Commonwealth, I have emphasized that to sustain quality and access to care in Massachusetts hospitals it is vital that the health care market supports competitive RN wages and working conditions to minimize RN labor shortages.

Multiple commentators in these hearings have noted that market and regulatory cost containment reforms need not be mutually exclusive. Essential health care services should not be left to the whims of the free market, nor can regulation alone assure that costs are properly aligned with quality outcomes. Registered nurses are the largest group of health care providers in the Commonwealth and we have an important role in identifying reforms to promote universal access to high quality, cost-effective care. Thank you for this opportunity to share my thoughts on innovative methods to evaluate the value and performance of hospitals that includes, and sustains, the unique contributions of registered nurses.

Citations:

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